SECTION 1.0 INTRODUCTION

The Chesapeake Bay Critical Area Protection Act (Critical Area Act) was enacted in 1984 by the Maryland General Assembly to help reverse the deterioration of the Chesapeake Bay and the surrounding environment. In 2002, the Act was amended to add the Atlantic Coastal Bays to the area protected by the Critical Area regulations. The Act recognizes that the land immediately surrounding the Bays and their tributaries has the greatest potential to affect its water quality and wildlife habitats. The "Critical Area" is designated as all land within 1,000 feet of tidal waters or from the edge of tidal wetlands. The Act is designed to promote environmentally sensitive stewardship of land in the Critical Area. It addresses three principal concerns: the accommodation of future growth and development; sensitive utilization of natural resources; and the preservation of certain resources for future generations. More detailed information about the Critical Area Act and the local Critical Area regulations designed to preserve and protect the Chesapeake Bay and the Atlantic Coastal Bays can be found online at: www.dnr.state.md.us/CriticalArea.

Within the Critical Area there are three land use classifications or overlay zones: Resource Conservation Areas (RCA), Limited Development Areas (LDA), and Intensely Developed Areas (IDA). Intensely Developed Areas are the areas that were predominated by residential, commercial, industrial, and institutional land uses at the time of the original Critical Area mapping and where relatively little natural habitat occurred. IDAs are also considered the preferred locations for future growth through redevelopment and/or new development.

The criteria set forth in conjunction with the Critical Area Act require that any development within the IDA be accompanied by practices to reduce water quality impacts associated with stormwater runoff. The Criteria further specify that these practices must be capable of reducing stormwater pollutant loads from a development site to a level at least 10% below the load generated by the same site prior to development. This requirement is commonly referred to as the "10% Rule."

The responsibility of implementing the Criteria is delegated to each local government. Therefore, each jurisdiction must ensure that the 10% Rule is met for development projects located within the IDA. In order to provide a consistent approach to compliance with the 10% Rule, the Critical Area Commission published a guidance document, "A Framework for Evaluating Compliance with the 10% Rule in the Chesapeake Bay Critical Area" in 1987 (MWCOG, 1987). This document was then revised in 1993, and divided into three guidance manuals: an Applicant's Guide, a Plan Reviewer's Guide, and a Technical Manual.

Over the past decade, stormwater management has evolved dramatically in Maryland, both in terms of the overall strategies to treat stormwater and the most effective types of stormwater Best Management Practices (BMPs). In 2000, the Maryland Department of the Environment (MDE) developed, promulgated, and adopted the 2000 Maryland Stormwater Design Manual, Vol. I & II. The Stormwater Design Manual reflects up-to-date information on stormwater practices. It includes a brief appendix on the Critical Area 10% Rule, but

does not include all of the information needed to plan, design, and review sites, nor did it resolve all of the inherent differences between the State's stormwater management program and the Critical Area 10% Rule. The Maryland Stormwater Design Manual can be accessed online at: http://www.mde.state.md.us/Programs/WaterPrograms/SedimentandStormwater/stormwater_design/index.asp

The purpose of this Guidance Manual is to update and consolidate the three existing guidance documents. It is important to note that this guidance information applies to development and redevelopment of properties located within the Critical Area and designated as an Intensely Developed Area (IDA). Some of the information and concepts presented in this document may not be applicable to properties designated as Limited Development Area (LDA) or Resource Conservation Area (RCA). The Manual also addresses and clarifies the differences between complying with the 10% Rule and the Maryland Stormwater Design Manual. Other significant changes include:

- the use of a single concentration of 0.3 mg/L to characterize phosphorus concentrations in stormwater runoff for both new development and redevelopment scenarios; and
- detailed information regarding local government offset programs and offset fees.

The Guidance Manual is organized as follows:

Section 2 – Introduces the concept and selection of total phosphorus as the keystone urban pollutant.

Section 3 – Provides an overview of the methods to comply with the 10% Rule and details the approach to 10% Rule compliance.

Section 4 – Shows how to prepare the Standard Application Process and includes sample worksheets.

Section 5 – Describes the shorter process for complying with the 10% Rule for development of an individual single-family lot and includes a sample Residential Water Quality Control Plan.

Section 6 – Provides guidance on how to implement offsets for development sites that cannot meet the 10% Rule.

Section 7 –Contains a series of frequently asked questions about complying with the 10% Rule.

Section 8 – References and Resources

Appendix A – Provides information about urban runoff pollutants.

Appendix B – Provides the criteria and justification for selection of a "keystone pollutant".

Appendix C – Provides information about the "Simple Method" for estimating pollutant export from urban development and redevelopment sites.

Appendix D – This technical memo provides the justification for the application of a single phosphorus concentration of 0.3 mg/l for both new development and redevelopment.

Appendix E – Provides descriptions, advantages, disadvantages and schematics for stormwater BMPs allowed under the Standard Plan.

Appendix F – Provides descriptions, advantages, disadvantages and schematics for stormwater BMPs allowed under the Residential Water Quality Plan.

Appendix G – This technical memo provides the basis for setting an offset fee that fully recovers the cost to remove phosphorus from one acre of impervious cover